

Notice of Allowability

Application No.

09/939,235

Examiner

Kenneth Tang

Applicant(s)

ARMSTRONG ET AL.

Art Unit

2195

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--
All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Amendment on 10/27/06.
2. ☒ The allowed claim(s) is/are 1-27, and 31; now renumbered as 1-28.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 9/20/06, 9/21/06
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 1/3/07
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


MENGUAL T. AN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2195

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
2. Authorization for this examiner's amendment was given in a telephone interview with Doug Scholer on 1/3/07.
3. The application has been amended as follows:

In the claims:

1. (Currently Amended) A method for sharing resources on a multithreaded CPU capable of executing a plurality of threads, the method comprising:

deferring a yield comprising relinquishing use of the multithreaded CPU by a first thread executing on the multithreaded CPU while waiting for at least a second thread executing on the multithreaded CPU to become ready to yield, wherein the plurality of threads must execute within a common virtual space; and

yielding the first thread in response to at least the second thread becoming ready to yield.

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11. (Currently Amended) The method according to claim 1, further comprising idling at least the first and second threads within [a] the common virtual space in response to at least the second thread being ready to yield.

13. (Currently Amended) A method for yielding a thread within a multithreaded CPU data processing system[, wherein each of a plurality of threads executing on a multithreaded CPU must execute within a common virtual space], the method comprising:

deferring a yield comprising relinquishing use of the multithreaded CPU by a thread while at least a subset of the plurality of threads yield, wherein each of a plurality of threads executing on a multithreaded CPU must execute within a common virtual space; and

abandoning the yield of the thread in response to detecting an event while the yield is deferred.

16. (Currently Amended) An apparatus comprising:

a computer having a multithreaded CPU, wherein the CPU is configured to execute a plurality of threads; and

a program resident in the computer, the program configured to defer a yield comprising relinquishing use of the multithreaded CPU by a first thread of the plurality while waiting for at least a second thread of the plurality to become ready to yield; and further to initiate the yield of

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the first thread in response to at least the second thread of the plurality becoming ready to yield,
wherein the program is configured to ensure that the plurality of threads execute within a
common virtual space.

26. (Currently Amended) The apparatus according to claim 16, wherein the program initiates idling at least the first and second threads of the plurality within [a] the common virtual space in response to at least the second thread of the plurality being ready to yield.

31. (Currently Amended) A program product stored in a computer recordable storage medium, comprising:

a program executed by a computer for yielding a thread within a multithreaded CPU data processing system, wherein each of a plurality of threads that execute on a multithreaded CPU must execute within a common virtual space, wherein the program is configured to defer a yield comprising relinquishing use of the multithreaded CPU by a first thread of the plurality while waiting for at least a second thread of the plurality to become ready to yield; and further to initiate the yield of the first thread in response to at least the second thread becoming ready to yield.

33. (Cancelled)

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth Tang whose telephone number is (571) 272-3772. The examiner can normally be reached on 8:30AM - 6:00PM, Every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kt
1/4/07


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